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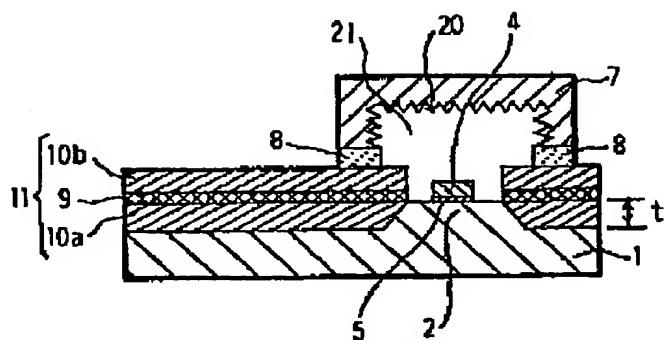
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APPLICANT : HITACHI LTD;

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TITLE : OPTICAL TRANSMISSION MODULE
AND ITS PRODUCTION



ABSTRACT : PROBLEM TO BE SOLVED: To obtain an optical transmission module having optical characteristics stable over a long period by roughening the inside wall surface of a hermetic cap.

SOLUTION: The hermetic cap 7 having a U shape in section is formed by using glass, and microruggedness is formed by sand blasting on the inside wall 20 of such hermetic cap 7. The hermetic cap 7 having UV transmittability is adhered and fixed by using a thermosetting adhesive 8 to form the optical transmission module. The mounting of the hermetic cap 7 is executed in a dry nitrogen atmosphere and the internal space of the hermetic cap 7 is filled with the dry nitrogen and is simultaneously isolated from the outdoor air. Any materials including metals, plastic, etc., in addition to brittle materials, such as glass and ceramics, are usable as the material of the hermetic cap. When moisture infiltrates the internal space 21 through the hermetic cap 7, the moisture is adsorbed in the microruggedness formed on the roughened inside wall 20 of the hermetic cap 7, to maintain the atmosphere in the hermetic cap 7 at a low humidity.

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